

Application No.: 09/918267

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**Remarks**

The Office Action dated July 16, 2003 has been received and reviewed. The pending claims are claims 1-62. Reconsideration and withdrawal of the rejections are respectfully requested.

**Objection to the Abstract**

The Abstract was objected to because the recitation "The disclosure provides..." in the Abstract allegedly contains language pertaining to the purported merits of the invention.

Applicants traverse this rejection for at least the following reasons. The purpose of the abstract is to enable the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure. 37 C.F.R. § 1.72(b). Applicants submit that the Abstract of the present disclosure is consistent with the purpose for the Abstract as stated in 37 C.F.R. § 1.72(b). First, the Abstract does not contain the phrase "The disclosure provides..." as is alleged by the Office Action. Second, the Abstract does not contain language pertaining to the purported merits of the invention. Instead, the Abstract describes the nature of the invention as is required by 37 C.F.R. § 1.72(b). For example, the Abstract states that the non-continuous retroreflective pattern may include retroreflective regions and non-retroreflective regions arranged such that thermal decay through the protective garment is not substantially decreased in the regions corresponding to the retroreflective material. This description of one embodiment of the present invention is consistent with the invention as recited, e.g., in claim 1 of the present invention. As such, the language in the Abstract describes the nature of the technical disclosure and not any merits of the disclosure.

For at least the above reasons, Applicants submit that the Abstract meets the requirements of 37 C.F.R. § 1.72(b). Reconsideration and withdrawal of this objection are, therefore, respectfully requested.

**The 35 U.S.C. § 103 Rejections**

Claims 1-26 and 31-62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bingham et al. (Re 30,892) in view of White et al. (WO 02/103,108).

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Applicants traverse this rejection and submit that claims 1-26 and 31-62 are not *prima facie* obvious in view of the cited references for at least the following reasons. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. See M.P.E.P. § 2143.

Applicants submit that claims 1-26 and 31-62 are not *prima facie* obvious because Bingham et al., either alone or in combination with White et al., does not teach all of the elements of such claims.

For example, independent claims 1, 25, and 53 recite a garment or article that includes a protective outer layer and retroreflective material formed over a portion of the protective outer layer in a non-continuous pattern to define retroreflective regions and non-retroreflective regions arranged such that thermal decay through the portion formed with retroreflective material is substantially equal to thermal decay through the protective outer layer without retroreflective material. Further, for example, independent claim 31 recites that the retroreflective material is arranged such that it does not substantially decrease thermal decay through the article.

In contrast to independent claims 1, 25, 31, and 53, Bingham et al. teaches a retroreflective-treated fabric formed, for example, by cascading minute retroreflectorization particles onto a fabric. See Bingham et al., Abstract. Bingham et al. does not teach a non-continuous pattern arranged such that thermal decay through the portion formed with retroreflective material is substantially equal to thermal decay through the protective outer layer without retroreflective material as is recited, e.g., in claim 1. In fact, Bingham et al. is silent regarding the thermal decay of the described fabrics. Because Bingham et al. does not teach all of the elements of claims 1, 31, and 53, such claims are not *prima facie* obvious in view of Bingham et al.

Further, for example, independent claims 24 and 55 recite that vapor permeability through the portion of the protective outer layer (or protective garment) formed with retroreflective material is substantially equal to vapor permeability through the protective outer layer (or protective garment) without the retroreflective material. Claim 59 recites that vapor permeability through the protective garment in portions screened with the vapor permeable pattern is substantially the same

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as vapor permeability through portions of the protective garment that are not screened with the vapor permeable pattern. In addition, for example, claim 52 recites that the retroreflective material is arranged such that it does not substantially decrease vapor permeability through the article. Once again, Bingham et al. is silent regarding vapor permeability; therefore, Bingham et al. does not teach all of the elements of independent claims 24, 52, 55, and 59.

However, the Office Action alleges that Bingham et al. teaches that breathability of the treated fabric retains nearly its full original appearance, hand, feel, and breathability, "which the examiner feels is within the same scope as recited 'substantially equal thermal decay' and 'vapor permeability' limitations in the instant invention." Applicants traverse this allegation.

As stated above, one of the requirements of *prima facie* obviousness is that the reference or references teach all of the elements of the recited claim. The Office Action admits that Bingham et al. does not teach all of the elements of claim 1. However, the Office Action appears to allege that Bingham et al. inherently teaches an article where the thermal decay and/or vapor permeability through a retroreflective portion is substantially equal to the thermal decay and/or vapor permeability through non-retroreflective portions. Applicants traverse this allegation and submit that the Office Action has failed to meet its burden for showing inherency.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

Here, Bingham et al. is silent regarding the thermal decay and vapor permeability properties of the described retroreflective fabric. Further, the Office Action fails to provide a

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basis in fact and/or technical reasoning for its allegation that Bingham et al. inherently teaches such properties. Because the Office Action has not met its burden for showing inherency, Applicants submit that the pending claims are not *prima facie* obvious in view of Bingham et al.

The addition of White et al. does nothing to correct the above-mentioned deficiencies of Bingham et al. Further, Applicants submit that White et al. is not a proper prior art reference. For example, the present application received a filing date of July 30, 2001. White et al., on the other hand, was filed on June 14, 2002 and published on December 27, 2002. White et al. is not a proper 35 U.S.C. § 102(e) reference because its international filing date of June 14, 2002 is after the present application's filing date of July 30, 2001.

Dependent claims 2-23, 26, 32-51, 54, 56-58, and 60-61, which depend from one of independent claims 1, 24-25, 31, 52-53, 55, and 59, are not *prima facie* obvious for the same reasons as presented above for independent claims 1, 24-25, 31, 52-53, 55, and 59. In addition, each of these dependent claims recite additional elements that further support patentability when combined with independent claims 1, 24-25, 31, 52-53, 55, and 59.

The Office Action, however, further alleges that the elements of claims 2-4, 7-8, 12-16, 18-19, 21, 25-26, 34-36, 39-40, 42-45, 48-49, 51, 53-54, and 56 are arbitrary and unsupported by the specification. The Office Action further alleges that these unsupported elements cannot be a basis for patentability. In support of this allegation, the Office Action cites *In re Woodruff*, 919 F.2d 1575, 1578, 16 U.S.P.Q.2d 1934 (Fed. Cir. 1990). Applicants traverse this allegation.

Applicants submit that *In re Woodruff* is not of relevance to the patentability of the pending claims. For example, *In re Woodruff* held that, in situations where a claimed range overlaps with ranges found in the prior art, the applicant "must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." *In re Woodruff*, 919 F.2d 1575, 1578, 16 U.S.P.Q.2d 1934 (Fed. Cir. 1990); *see also* M.P.E.P. § 2144.05. In contrast to *In re Woodruff*, the pending claims do not contain ranges that overlap with ranges found in the prior art. For example, claim 7 recites that the reflective material formed over a portion of the protective outer layer has a reflective brightness greater than 50 candelas/(lux\*meter<sup>2</sup>). Bingham et al., on the other hand, explicitly teaches away from having a retroreflectivity of greater than 50 candelas/(lux\*meter<sup>2</sup>). Bingham et al. states that "to minimize daytime visibility, the [retroreflective] treatment usually provides less than 20, more

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often less than 10, and most often less than 5, candelas per square meter of treated surface per lux of incident light." Bingham et al., column 8, lines 40-44. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). In other words, claim 7 does not involve a situation of overlapping ranges.

Further, Applicants submit that the elements of claims 2-4, 7-8, 12-16, 18-19, 21, 25-26, 34-36, 39-40, 42-45, 48-49, 51, 53-54, and 56 are fully supported by the Specification. For example, support for claims 2-4 can be found in the Specification, e.g., at page 7, lines 15-21. Further, for example, support for claims 7-8 can be found in the specification, e.g., at page 9, line 16 through page 10, line 21.

For at least the above reasons, Applicants submit that claims 1-26 and 31-62 are patentable over Bingham et al. in view of White et al. and Aldridge et al. Reconsideration and withdrawal of the rejections are respectfully requested.

Claims 27-30 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Bingham et al. in view of White et al. and further in view of Aldridge et al.

Applicants traverse this rejection and submit that claims 27-30 are not *prima facie* obvious because the combination of references do not teach all of the elements of such claims. For example, claim 27 recites that the retroreflective regions and non-retroreflective regions are arranged such that thermal decay through the portion formed with retroreflective material is substantially equal to thermal decay through the protective outer layer without retroreflective material. As stated above in regard to claim 1, Bingham et al. is silent regarding thermal decay. Therefore, Bingham et al. does not teach all of the elements of claim 27.

The addition of White et al., which is not a proper prior art reference, and Aldridge et al. does nothing to cure the above-mentioned deficiencies of Bingham et al. Therefore, claim 27 is not *prima facie* obvious in view of the cited references.

Claims 28-30, which depend from independent claim 27, are not *prima facie* obvious for the same reasons as presented above for claim 27. In addition, claims 28-30 each recite additional elements that further support patentability when combined with independent claim 27.

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For at least the above reasons, Applicants submit that claims 27-30 are patentable over the cited references. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

**Summary**

It is respectfully submitted that the pending claims are in condition for allowance. Reconsideration and withdrawal of all rejections are respectfully requested. The examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted,

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Date

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